INTENSIVE CULTURAL RESOURCES SURVEY OF THE PROPOSED NEC BULVERDE/1604 62.26-ACRE COMMERCIAL PROPERTY BEXAR COUNTY, TEXAS

Prepared for

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ABSTRACT

On behalf of Pape-Dawson Engineers, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the 62.26-acre NEC Bulverde/1604 project area in Bexar County, Texas. In addition, the survey attempted to reassess previously recorded sites 41BX66 and 41BX68 that were reportedly within the project area. The work was done to satisfy requirements of the City of San Antonio's Historic Preservation Office (HPO). The project area is in northern San Antonio, between United States (U.S.) 281 and Interstate Highway (IH) 35 in the northeastern quadrant of the Bulverde Road and N. Loop 1604 intersection.

The investigations included a background literature and records review and an intensive pedestrian survey with subsurface investigations. These investigations determined that neither of the two previously recorded sites (41BX66 and 41BX68) is within the project area. The survey included 27 shovel tests placed in areas that had the highest potential for containing buried cultural materials with good integrity. No cultural materials were identified within any of the shovel test excavations, and no artifacts, features, or standing structures were observed on the surface of the project area. Overall, the project area is a rocky upland setting with prevalent limestone bedrock outcroppings. SWCA recommends no further archaeological investigations within the project area.

No artifacts were collected; therefore, nothing was curated.

INTRODUCTION

On behalf of Pape-Dawson Engineers, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the 62.26-acre NEC Bulverde/1604 project area in northern Bexar County, Texas. The survey also attempted to reassess previously recorded sites 41BX66 and 41BX68 that were reportedly located within the project area. The work was done to satisfy requirements of the City of San Antonio's Historic Preservation Office (HPO).

SWCA archaeologists Mary Jo Galindo and Ken Lawrence conducted the fieldwork on February 6, 2008.

DEFINITION OF STUDY AREA

The project area appears on the Longhorn, Texas, USGS 7.5-minute topographic quadrangle in northern San Antonio, Bexar County, Texas (Figure 1). The proposed project area is located 3.1 miles east of U.S. 281 and roughly 6.3 miles west of Interstate Highway (IH) 35. The 62.26-acre project area is located northeast of the intersection of North Loop 1604 and Bulverde Road, with Loop 1604 as its southern boundary and Bulverde Road as its western boundary. A San Antonio Water Systems (SAWS) flood water levee aligns the northern boundary while a limestone quarry is located to the east of the project area. The property is roughly oriented northeast-southwest at its longest axis.

Although the depths of impacts for the project construction have not been indicated, current construction within the property is over six feet in depth (Figure 2). The project area is situated in an upland setting roughly divided between a small ridge in the western portion of the property and a small tributary drainage of Elm Creek in the eastern portion. The majority of the project area occupies rocky lime-

stone upland terrain with little vertical depth and broad areas of exposed bedrock (Figure 3). About half of the project area contains thick vegetation with an overstory of various oaks and cedar, and an understory of juniper and various shrubs (Figure 4). The other half has been extensively cleared of all cedar leaving only scattered oaks and short grasses (Figure 5). Ground visibility within the project area ranged from a low of 20 percent to a high of 100 percent, but the visibility was typically about 60 percent.

The geology of the project area is mapped as Cretaceous-period Edwards Limestone undivided (Barnes 1983). This consists of limestone with abundant fine to coarse grained gray to grayish brown chert, 300–500 feet thick.

In order of predominance, the soils of the project area are mapped as Crawford and Bexar stony soils, Tarrant association, and Lewisville silty clay within the Tarrant-Bracket association described as shallow to very shallow soils over limestone. The Crawford and Bexar stony soils (0-5 percent slopes) are characterized as very stony clay in texture and are shallow to moderately deep over hard limestone. The Tarrant association has 1–5 percent slopes and is described as occupying level to gently undulating within in a prairie and plateau topography with very shallow calcareous clayey soils over hard limestone. The Lewisville silty clay, with 0-1 percent slopes, are characterized as occupying nearly level broad terraces along creeks and rivers and are about two feet thick (Taylor et al. 1991).

METHODS

BACKGROUND REVIEW

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archae-

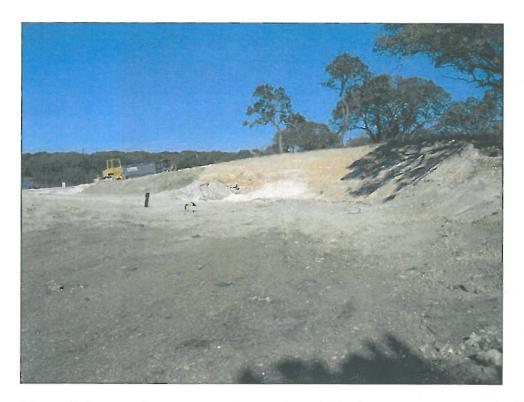


Figure 2. Impacts from current construction within the property are over six feet in depth.



Figure 3. The project area contains rocky limestone upland terrain with little vertical depth and broad areas of exposed bedrock.

ologist reviewed the Longhorn, Texas, USGS 7.5-minute topographic quadrangle map at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission's (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: National Register of Historic Places (NRHP) properties, State Archeological Landmarks (SALs), Official Texas Historical Markers, Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the Soil Survey of Bexar County, Texas (Taylor et al. 1991) and the Geologic Atlas of Texas, San Antonio Sheet (Barnes 1983). Aerial photographs were reviewed to assist in identifying any disturbances.

FIELD METHODS

SWCA conducted an intensive cultural resources survey of entire 62.26-acre Bulverde/1604 project area. These investigations consisted of an intensive pedestrian survey with subsurface investigations and an attempted reassessment of previously recorded sites 41BX66 and 41BX68 that were reportedly located within the project area.

Archaeologists examined the ground surface and erosional profiles for cultural resources. Subsurface investigations involved shovel testing in settings with the potential to contain buried cultural materials. The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassible limestone, whichever came first. The matrix from each shovel test was screened through ¼-inch mesh, and the location of each excavation was plotted using a hand-held GPS receiver. Each shovel test was recorded on a

standardized form to document the excavations. The field survey also focused on locating and reassessing previously recorded archaeological sites 41BX66 and 41BX68. Archaeological site 41BX68 is reportedly located primarily on the west side of Bulverde Road with the extreme eastern margin extending across the road into the project area. Previously recorded site 41BX66 is located on the extreme southwestern edge of the Bulverde/1604 project area.

CULTURAL SETTING

The proposed project area falls within Central Texas Archeological Region (Pertulla 2004). Although the archaeological regions are not absolute, they do generally reflect recognized biotic communities and physiographic areas in Texas (Pertulla 2004:6). The Central Texas Region, as its name implies, is in the center of Texas and covers the Edwards Plateau and portions of the Blackland prairie east of the Edwards Plateau. The following synopses provide basic culture histories of the Central Texas region.

The archaeological record of the Central Texas region is known from decades of investigations of stratified open air sites and rockshelters throughout the Edwards Plateau, its highly dissected eastern and southern margins, and the adjoining margins of physiographic regions to the east and south (see Collins [2004] for review). Traditionally, the Central Texas archaeological area has included the Balcones Canyonlands and Blackland Prairie—that is, north of San Antonio (e.g., Prewitt 1981; Suhm 1960). These two areas are on the periphery of the Central Texas archaeological area, and their archaeological records and projectile point style sequences contain elements that suggest influences from and varying degrees of contact over time with other areas such as the Lower Pecos and Gulf Coastal Plain (Collins 2004; Johnson and Goode 1994). Archaeological sites in these two areas

terns, suggesting a shift in adaptation patterns (Bever and Meltzer 2007; Meltzer and Bever 1995:60 and 74). Folsom points appear more frequently in the coastal plain as well as the South Texas plain, located to the south and southeast of Bexar County. As Folsom points are almost exclusively found in plains settings (they are conspicuously lacking in the Edwards Plateau), the technology perhaps marks a more specialized adaptation, likely to a more intensive reliance on ancient bison.

Postdating Clovis and Folsom points in the archaeological record are a series of dart point styles (primarily unfluted lanceolate darts) for which the temporal, technological, or cultural significance is unclear. Often, the Plainview type name is assigned these dart points, but Collins (2004:117) has noted that many of these points typed as Plainview do not resemble Plainview type-site points in thinness and flaking technology. Recent investigations at the Wilson-Leonard site (see Bousman 1998) and a statistical analysis of a large sample of unfluted lanceolate points by Kerr and Dial (1998) have shed some light on this issue. At Wilson-Leonard, the Paleoindian projectile point sequence includes an expanding-stem dart point termed Wilson, which dates to ca. 10,000-9,500 B.P. Postdating the Wilson component is a series of unfluted lanceolate points referred to as Golondrina-Barber, St. Mary's Hall, and Angostura, but their chronological sequence is poorly understood. Nonetheless, it has become clear that the artifact and feature assemblages of the later Paleoindian subperiod appear to be Archaic-like in nature and in many ways may represent a transition between the early Paleoindian and succeeding Archaic periods (Collins 2004:118).

Archaic Period

The Archaic period for Central Texas dates from ca. 8,800 to 1,300–1,200 B.P. (Collins 2004:119–121) and generally is believed to

represent a shift toward hunting and gathering of a wider array of animal and plant resources and a decrease in group mobility (Willey and Phillips 1958:107-108). In the eastern and southwestern United States and on the Great Plains, development of horticultural-based, semisedentary to sedentary societies succeeds the Archaic period. In these areas, the Archaic truly represents a developmental stage of adaptation as Willey and Phillips (1958) define it. For Central Texas, this notion of the Archaic is somewhat problematic. An increasing amount of evidence suggests that Archaic-like adaptations were in place before the Archaic (see Collins 2004:118, 1998; Collins et al. 1989) and that these practices continued into the succeeding Late Prehistoric period (Collins 1995:385; Prewitt 1981:74). In a real sense, the Archaic period of Central Texas region is not a developmental stage, but an arbitrary chronological construct and projectile point style sequence. Establishment of this sequence is based on several decades of archaeological investigations at stratified Archaic sites along the eastern and southern margins of the Edwards Plateau. Collins (1995, 2004) and Johnson and Goode (1994) have divided this sequence into three partsearly, middle, and late-based on perceived (though not fully agreed upon by all scholars) technological, environmental, and adaptive changes.

Early Archaic (8,800–6,000 B.P.) sites are small, and their tool assemblages are diverse (Weir 1976:115–122), suggesting that populations were highly mobile and densities low (Prewitt 1985:217). It has been noted that Early Archaic sites are concentrated along the eastern and southern margins of the Edwards Plateau (Johnson and Goode 1994; McKinney 1981). This distribution may indicate climatic conditions at the time, given that these environments have more reliable water sources and a more diverse resource base than other parts of the region. Early Archaic projectile

concentrations of cultural materials. Establishment of large cemeteries along drainages suggests certain groups had strong territorial ties (Story 1985:40). A variety of projectile point styles appeared throughout the Late Archaic period. Johnson and Goode (1994:29-35) divide the Late Archaic into two parts, Late Archaic I and II, based on increased population densities and perceived evidence of Eastern Woodland ceremonial rituals and religious ideological influences. Middle Archaic subsistence technology, including the use of rock and earth ovens, continued into the Late Archaic period. Collins (2004:121) states that, at the beginning of the Late Archaic period, the use of rock ovens and the resultant formation of burned rock middens reached its zenith and that the use of rock and earth ovens declined during the latter half of the Late Archaic. There is, however, mounting chronological data that midden formation culminated much later and that this high level of rock and earth oven use continued into the early Late Prehistoric period (Black et al. 1997:270-284; Kleinbach et al. 1995:795). A picture of prevalent burned rock midden development in the eastern part of the Central Texas region after 2,000 B.P. is gradually becoming clear. This scenario parallels the widely recognized occurrence of post-2,000 B.P. middens in the western reaches of the Edwards Plateau (see Goode 1991).

The use of rock and earth ovens (and the formation of burned rock middens) for processing and cooking plant foods suggests that this technology was part of a generalized foraging strategy. The amount of energy involved in collecting plants, constructing hot rock cooking appliances, and gathering fuel ranks most plant foods relatively low based on the resulting caloric return (Dering 1999). This suggests that plant foods were part of a broad-based diet (Kibler and Scott 2000:134) or part of a generalized foraging strategy, an idea Prewitt (1981) put forth earlier. At times during the

Late Archaic, this generalized foraging strategy appears to have been marked by shifts to a specialized economy focused on bison hunting (Kibler and Scott 2000:125–137). Castroville, Montell, and Marcos dart points are elements of tool kits often associated with bison hunting (Collins 1968). Archaeological evidence of this association is seen at Bonfire Shelter in Val Verde County (Dibble and Lorrain 1968), Jonas Terrace (Johnson 1995), Oblate Rockshelter (Johnson et al. 1962:116), John Ischy (Sorrow 1969), and Panther Springs Creek (Black and McGraw 1985).

The Archaic period represents a hunting and gathering way of life that was successful and that remained virtually unchanged for more than 7,500 years. This notion is based in part on fairly consistent artifact and tool assemblages through time and place and on resource patches that were used continually for several millennia, as the formation of burned rock middens shows. This pattern of generalized foraging, though marked by brief shifts to a heavy reliance on bison, continued almost unchanged into the succeeding Late Prehistoric period.

Late Prehistoric Period

Introduction of the bow and arrow and, later, ceramics into Central Texas marked the Late Prehistoric period. Population densities dropped considerably from their Late Archaic peak (Prewitt 1985:217). Subsistence strategies did not differ greatly from the preceding period, although bison again became an important economic resource during the late part of the Late Prehistoric period (Prewitt 1981:74). Use of rock and earth ovens for plant food processing and the subsequent development of burned rock middens continued throughout the Late Prehistoric period (Black et al. 1997; Kleinbach et al. 1995:795). Horticulture came into play very late in the region

mate demise around 1800 brought the peaceful movement of some indigenous groups into mission life, but others were forced in or moved in to escape the increasing hostilities of southward-moving Apaches and Comanches. Many of the Payaya and Juanca lived at Mission San Antonio de Valero (the Alamo), but so many died there that their numbers declined rapidly (Campbell 1988:106, 121-123). By the end of the mission period, European expansion and disease and intrusions by other Native American peoples had decimated many Native American groups. The small numbers of surviving Payaya and Juanca were acculturated into mission life. The last references to the Juanca and Payaya were recorded in 1754 and 1789, respectively, in the waning days of the mission (Campbell 1988:98, 123). By that time, intrusive groups such as the Tonkawa, Apache, and Comanche had moved into the region to fill the void. Outside of the missions, few sites attributable to these groups have been investigated. To complicate matters, many aboriginal ways of life endured even after contact with the Spanish. For example, manufacture of stone tools continued even for many groups settling in the missions (Fox 1979). The nineteenth century brought the final decimation of many Native American groups, the United States' defeat of the Apaches and Comanches, and the forced removal of Native Americans to reservations.

RESULTS

BACKGROUND REVIEW

In addition to the two aforementioned previously recorded sites within the project area (41BX66 and 41BX68) there are 11 recorded sites and six previously conducted archaeological surveys within a mile of the project area.

Site 41BX66 is located on the southeastern boundary of the project area, bisected by a

barbed wire fence line. The site is situated between Elm Creek and one of its tributary drainages. The site is a small (15 m diameter) Archaic prehistoric campsite with debitage, abundant chipped stone tools, and a couple of thermal features (i.e., fire pits). However, no temporally diagnostic artifacts are indicated by the site investigator. Recorded in 1971, the site was then indicated to be disturbed by erosion and possibly by construction of Loop 1604. The site was recommended for extensive testing to reveal more cultural features (TARL, 41BX66 site form).

Site 41BX68 is located on the western side of Bulverde Road with only its extreme eastern end extending across the roadway and into the project area. The site is situated on an upland ridge paralleling Loop 1604 between East Elm Creek and Elm Creek. Initially recorded in 1971, the site was thought to be 15 m in diameter. However, the site was revisited in 1974 and enlarged to 800 m east-west and 400 m north-south encompassing the entire ridge. No temporally diagnostic artifacts are indicated; the site 41BX68 is recorded as an Archaic quarry with abundant debitage, cores, and chipped stone tools. Erosion is the only recorded disturbance for this site by either of the 1971 or 1974 investigators. Only a possible grid collection of the site was recommended (TARL, 41BX68 site forms).

Eleven previously recorded archaeological sites are within a mile of the project area. These archaeological sites include 41BX301, 41BX454, 41BX901, through 41BX903 41BX907, 41BX909, 41BX913, and 41BX1459. All of these sites are prehistoric with the sole exception of 41BX913, which is a middle-nineteenth-century historic house. predominance of Also, the the sites (41BX901, 41BX903 through 41BX907, 41BX909, and 41BX913) was recorded in 1990. Archaeological sites 41BX301 and 41BX454 were recorded in 1974-75 while no

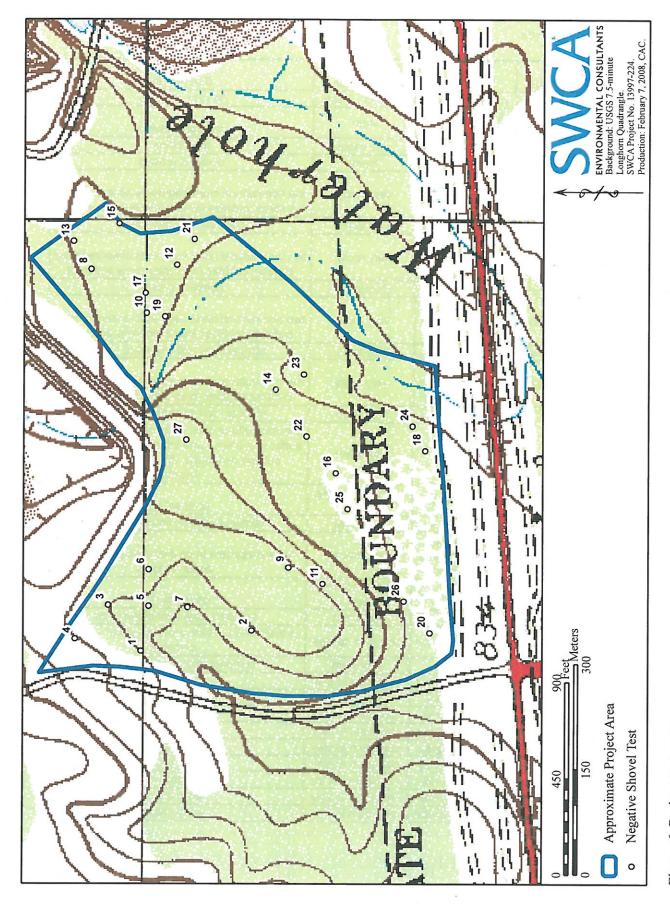


Figure 6. Project area map.



Figure 7. The southwest corner of the project area is bordered by the Bulverde Road right-of-way that contains various buried and overhead utilities.



Figure 8. Disturbances along the slopes of the finger ridge in the southwestern portion of the project area include clear cutting and water erosion.



Figure 9. An SWCA archaeologist marks the center of an intermittent drainage within the project area. No evidence of eroding cultural materials or features was detected along this drainage.

REFERENCES

Barnes, V. E.

1983 Geologic Atlas of Texas, San Antonio Sheet. Bureau of Economic Geology, The University of Texas at Austin.

Bever, M. R. and D. J. Meltzer

2007 Exploring Variation in Paleoindian Live Ways: The Third Revised Edition of the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 78:65–99.

Black, S. L.

1989 Central Texas Plateau Prairie. In From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos, Texas, by Thomas R. Hester, Stephen L. Black, D. Gentry Steele, Ben W. Olive, Anne A. Fox, Karl J. Reinhard, and Leland C. Bement, pp. 17–38. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

Black, S. L., L. W. Ellis, D. G. Creel, and G. T. Goode

1997 Hot Rock Cooking on the Greater Edwards Plateau: Four Burned Rock Midden Sites in West Central Texas, Volumes 1 and 2. Studies in Archeology 22. Texas Archeological Research Laboratory, The University of Texas at Austin. Archeology Studies Program, Report 2. Environmental Affairs Department, Texas Department of Transportation, Austin.

Black, S. L., and A. J. McGraw

1985 The Panther Springs Creek Site: Cultural Change and Continuity within the Upper Salado Creek Watershed, South-Central Texas. Archeological Survey Report No. 100. Center for Archeological Research, The University of Texas at San Antonio.

Bolton, H. E.

1970 Texas in the Middle Eighteenth Century: Studies in Spanish Colonial History and Administration. The Texas State Historical Association and the University of Texas Press, Austin.

Bousman, C. B.

1998 Paleoenvironmental Change in Central Texas: The Palynological Evidence. *Plains Anthropologist* 43(164):201–219.

Campbell, T. N.

1988 Indians of Southern Texas and Northeastern Mexico: Selected Writings of Thomas Nolan Campbell.

Texas Archeological Research Laboratory, with the cooperation of the Department of Anthropology, the College of Liberal Arts, and the Institute of Latin American Studies, The University of Texas at Austin.

Collins, M. B.

1968 A Note on Broad Corner-Notched Projectile Points Used in Bison Hunting in Western Texas. *The Bull Roarer* 3(2):13–14. The University of Texas Anthropological Society, Department of Anthropology, The University of Texas at Austin.

1990 The Archeological Sequence at Kincaid Rockshelter, Uvalde County, Texas. Transactions of the Twenty-Fifth Regional Archeological Symposium for Southeastern New Mexico and Western Texas, pp. 25–34.

1995 Forty Years of Archeology in Central Texas. *Bulletin of the Texas Archeological Society* 66:361–400.

Houk, B. A., S. Tomka, B. Bousman, C. K. Chandler, B. Moses, M. Renner, and M. Lyons

1997 The Greenbelt Core: A Polyhedral Blade Core from San Antonio, Texas.

Current Research in the Pleistocene 14:104–106.

Huebner, J. A.

1991 Late Prehistoric Bison Populations in Central and South Texas. *Plains Anthropologist* 36(137):343–358.

Jelks, E. B.

1962 The Kyle Site: A Stratified Central Texas Aspect Site in Hill County, Texas. Archaeology Series No. 5. Department of Anthropology, The University of Texas at Austin.

Johnson, L., Jr.

1995 Past Cultures and Climates at Jonas Terrace: 41ME29 of Medina County, Texas. Report No. 40. Office of the State Archeologist, Texas Historical Commission, Austin.

Johnson, L, and G. T. Goode

1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archeological Periods, on the Eastern Edwards Plateau. *Bulletin of the Texas Archeological Society* 65:1–51.

Johnson, L, Jr., D. A. Suhm, and C. D. Tunnell

1962 Salvage Archeology of Canyon Reservoir: The Wunderlich, Footbridge, and Oblate Sites. Bulletin No. 5. Texas Memorial Museum, The University of Texas at Austin.

Katz, P. R.

1987 Archeological Mitigation at 41BX300, Salado Creek Watershed, South-Central Texas. Archeological Survey Report No. 130. Center for Archeological Research, The University of Texas at San Antonio.

Kelley, J. C., and T. N. Campbell

1942 What are the Burnt Mounds of Texas? *American Antiquity* 7(3):319–322.

Kerr, A. C., and S. W. Dial

1998 Statistical Analysis of Unfluted Lanceolate and Early Bifurcate Stem Projectile Points. In Wilson-Leonard:

An 11,000-Year Archeological Record of Hunter-Gatherers in Central Texas, Volume II, edited and assembled by Michael B. Collins, pp. 447–505. Studies in Archeology 31. Texas Archeological Research Laboratory, The University of Texas at Austin. Archeology Studies Program, Report 10. Environmental Affairs Division, Texas Department of Transportation.

Kibler, K. W., and A. M. Scott

2000 Archaic Hunters and Gatherers of the Balcones Canyonlands: Data Recovery Excavations at the Cibolo Crossing Site (41BX377), Camp Bullis Military Reservation, Bexar County, Texas. Reports of Investigations No. 126. Prewitt and Associates, Inc., Austin.

Lukowski, P. D.

1988 Archeological Investigations at 41BXI, Bexar County, Texas. Archeological Survey Report No. 135. Center for Archeological Research, The University of Texas at San Antonio.

Wandsnider, L.

1997 The Roasted and the Boiled: Food Composition and Heat Treatment with Special Emphasis on Pit-Hearth Cooking. *Journal of Anthropological Archaeology* 16:1–48.

Weir, F. A.

1976 The Central Texas Archaic. Ph.D. dissertation, Department of Anthropology, Washington State University, Pullman.

Wesolowsky, A. B., T. R. Hester, and D. R. Brown

1976 Archeological Investigations at the Jetta Court Site (41TV151) Travis County, Texas. *Bulletin of the Texas Archeological Society* 47:25–87.

Willey, G. R., and P. Phillips

1958 Method and Theory in American Archaeology. University of Chicago Press, Chicago.

Wilson, E. W.

1930 Burnt Rock Mounds of Southwest Texas. Bulletin of the Texas Archeological and Paleontological Society 2:59–63.